AbSci Announces Acquisition of Target Discovery Company Totient

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- AbSci's approach to drug creation has the potential to disrupt conventional biologic drug discovery

- Complementary technologies combined to enable streamlined design and production of next-generation therapeutic proteins for disease-specific targets

VANCOUVER, Wash., June 14, 2021 /PRNewswire/ -- AbSci, the synthetic biology company unlocking the potential of proteins as next-generation therapeutics, today announced the acquisition of Totient, a discovery company harnessing human immune responses to identify novel antibodies and their therapeutic targets. This acquisition adds antibody and target discovery technology to AbSci's platform for therapeutic protein design and biomanufacturing optimization.

The development of comprehensive predictive models that encompass the interactions of key proteins related to immune responses in different disease states is an enormous opportunity for biologic drug development. Building on Totient's ability to identify fully-human antibodies from patients who demonstrate differentiated immune responses, AbSci expects to generate a large collection of natural human antibodies and target antigens that it may leverage for therapeutic protein design as well as deep learning model training.

To date Totient has reconstructed more than 4,500 antibodies from over 50,000 patients and has de-orphaned a collection of promising antibodies by identifying and validating their target antigens. AbSci's high-throughput single cell protein expression systems and assays offer a complementary platform for rapidly and systematically de-orphaning the computationally derived antibody sequences in Totient's growing library.

The disease targets identified may be used in the discovery of new therapeutics, including those based on paired antibody sequences. Additionally, the data captured from billions of single cell experiments offer training sets for AbSci's Denovium Engine™ deep learning models.

"Totient's innovative work identifying disease-relevant molecules has exciting therapeutic potential," commented Sean McClain, founder and CEO of AbSci. "We believe that the combination of the Totient technology with AbSci's platform, including our Denovium AI, provides us the framework and data to enable *in silico* targeted drug design, and ultimately achieve our goals of making the best medicines available to patients in need."

"Together, AbSci and Totient are much more than the sum of our parts, with clear opportunities for synergy of our platforms and technologies," said Deniz Kural, PhD, co-founder and CEO of Totient. "Our computational biology technology allows us to identify thousands of new antibodies and other categories of proteins, and with AbSci, we look forward to scaling our target discovery capabilities to comprehensively de-orphan antibodies and validate new opportunities for drug development."

Terms of the transaction are not being disclosed at this time.

About AbSci
AbSci is the AI-powered synthetic biology company unlocking the potential of proteins as the next generation of therapeutics. We built our Integrated Drug Creation™ Platform to accelerate discovery of novel biotherapeutic drug candidates and generation of the cell lines to manufacture them in a single efficient process. Biotech and pharma innovators partner with us to develop new protein-based drugs, including those that may be impossible to make with other technologies. Our goal is to enable the creation of better medicines by *Translating Ideas into Drugs*^{TM}. For more information, please visit absci.com.

About Totient
Totient is enabling next generation cell therapies and other therapeutic modalities by building the largest library of human-derived antibodies to novel and known tissue-specific antigens. Totient reconstructs antibodies from patients experiencing exceptional immune responses. For more information, visit www.totient.bio.

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